



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,867	07/21/2004	Masahide Ishikawa	040338	8698
23850 7590 07/10/2008 KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005				
EXAMINER				
RONESL VICKY M				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
07/10/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/500,867

**Applicant(s)**

ISHIKAWA ET AL.

**Examiner**

VICKEY RONESI

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-12 and 15-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 9-12 and 15-24 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 1/9/08  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
2. All outstanding rejections are withdrawn in light of applicant's amendment filed on 3/28/2008.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 3/28/2008. In particular, claims have been amended to exclude combinations of (B2) and (C1). Thus, the following action is properly made final.

### ***Claim Objections***

4. Claims 9 and 15 are objected to because of the following reasons:

With respect to claims 9 and 15, part (C2), the Markush language "selected from the group consisting of" is improper the word "and" is not recited. Replace "or" with --and-- in line 2 of (C2) of each claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

5. Claims 9-12 and 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi '615 (US 6,238,615).

Kobayashi '615 discloses pellets (col. 19, line 12) for use in making containers for beer (col. 13, lines 55-56) comprising a polyolefin resin; dibenzylidene sorbitol which is present in an exemplified amount 0.4 parts by weight (pbw) per 100 pbw polyolefin (col. 14, line 56); 50 ppm

Art Unit: 1796

to 1 wt % relative to dibenzylidene sorbitol alkaline compounds (C2) such as lithium stearate (col. 6, lines 31-52) which is used to stabilize the composition; 0.5-30 wt % relative to dibenzylidene sorbitol (col. 6, lines 56-59) surfactant (C2) such as sodium or potassium salts of C<sub>8</sub>-C<sub>22</sub> fatty acids (col. 7, lines 41-42) which is used to improve the dispersion of dibenzylidene sorbitol in the polyolefin resin (col. 6, line 66 to col. 7, line 3); and 0.05-20 wt % relative to dibenzylidene sorbitol (col. 7, lines 52-53) of a melting point depressing agent (B2) such as hydroxypolycarboxylic acids including 12-hydroxystearic acid (col. 8, lines 7-17) which is used to enable the dibenzylidene sorbitol to be dispersed on a molecular level in the polyolefin resin (col. 7, lines 59-67).

Kobayashi '615 does not exemplify a mixture of presently claimed (B2) and presently claimed (C2).

Even so, given that Kobayashi '615 teaches the use of both (B2) and (C2) for specific advantages, it would have been obvious to one of ordinary skill in the art utilize each taught by Kobayashi '615 and thereby obtain a composition that intrinsically suppresses odor and taste originating from dibenzylidene sorbitol. Case law holds that the selection of a known material based on its suitability for its intended use supports *prima facie* obviousness. *Sinclair & Carroll Co vs. Interchemical Corp.*, 325 US 327, 65 USPQ 297 (1045). Although Kobayashi '615 uses (B2) and (C2) in a different capacity than applicant, case law holds that it "does not alter the conclusion that their use in a prior art composition would have been *prima facie* obvious from the purpose disclosed in the reference." *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

Art Unit: 1796

6. Claims 9-12 and 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi '843 (US 6,245,843) in view of Kobayashi '615 (US 6,238,615).

US '843 discloses a powder diacetal composition for use as a nucleating agent in polyolefin resin (abstract) for use in making containers (col. 32, line 60) comprising at least one dibenzylidene sorbitol (col. 3, lines 36-59) and 0.2-25 parts pbw (col. 19, lines 16-17) per 100 pbw dibenzylidene sorbitol binder such as hydroxyl group-containing carboxylic acids (e.g., 12-hydroxystearic acid) (B2) (col. 17, lines 31-39). The diacetal composition is added to polyolefin in an amount of 0.01-5 pbw per 100 pbw polyolefin (col. 30, lines 24-28).

US '843 fails to disclose alkali metal salts of C<sub>8</sub> to C<sub>38</sub> saturated or unsaturated fatty acids (C2).

Kobayashi '615 discloses pellets (col. 19, line 12) comprising a polyolefin resin; dibenzylidene sorbitol; 50 ppm to 1 wt % relative to dibenzylidene sorbitol alkaline compounds (C2) such as lithium stearate (col. 6, lines 31-52) which is used to stabilize the composition; and 0.5-30 wt % relative to dibenzylidene sorbitol (col. 6, lines 56-59) surfactant (C2) such as sodium or potassium salts of C<sub>8</sub>-C<sub>22</sub> fatty acids (col. 7, lines 41-42) which is used to improve the dispersion of dibenzylidene sorbitol in the polyolefin resin (col. 6, line 66 to col. 7, line 3).

Given that US '843 discloses a composition comprising dibenzylidene sorbitol and further given that dibenzylidene sorbitol is stabilized by adding alkaline compounds such a lithium sorbate or better dispersed by C<sub>8</sub>-C<sub>22</sub> fatty acids as taught by Kobayashi '615, it would have been obvious to one of ordinary skill in the art to utilize a the presently claimed (C2) in the Kobayashi '843 given the advantages had taught by Kobayashi '615 and thereby obtain a composition that intrinsically suppresses odor and taste originating from dibenzylidene sorbitol.

Case law holds that the selection of a known material based on its suitability for its intended use supports *prima facie* obviousness. *Sinclair & Carroll Co vs. Interchemical Corp.*, 325 US 327, 65 USPQ 297 (1045). Although Kobayashi '615 uses (C2) in a different capacity than applicant, case law holds that it "does not alter the conclusion that their use in a prior art composition would have been *prima facie* obvious from the purpose disclosed in the reference." *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

### ***Double Patenting***

7. Claims 9-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. US 6,914,088.

The rejection is adequately set forth in paragraph 8 of Office action mailed on 11/28/2007 and is incorporated here by reference.

Note that the terminal disclaimer filed on 3/28/2008 was not over US 6,914,008. Thus, the rejection is maintained.

8. Claims 9-24 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. US 6,914,088.

The rejection is adequately set forth in paragraph 9 of Office action mailed on 11/28/2007 and is incorporated here by reference.

This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Note that a statement of common ownership at the time of invention is required

to preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(c). It is suggested that applicant submit a statement such as, "Application X and Application Y were, at the time the invention of Application X was made, owned by Company Z." See MPEP § 706.02(1)(2). While the instant application and US 6,914,008 are presently commonly owned, 35 U.S.C. 103(c) requires a statement that the instant application and U.S.C. 102(c) were commonly owned at the time of invention.

9. Claims 9-24 are directed to an invention not patentably distinct from claims 1-3 of commonly assigned U.S. Patent No. US 6,914,088. Specifically, see the discussion set forth in paragraph 8 above.

The discussion in paragraph 10 of Office action mailed on 11/28/2007 is incorporated here by reference.

#### ***Response to Arguments***

10. Applicant's arguments filed on 3/28/2008 have been fully considered but they are not persuasive. Specifically, applicant argues that Kobayashi '843 fails to disclose or suggest the suppression of aldehyde by thermal decomposition

In response, although Kobayashi '843 uses its binder additive in a different capacity than applicant, case law holds that it "does not alter the conclusion that its use in a prior art composition would have been *prima facie* obvious from the purpose disclosed in the reference." *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972). While this motivation may not be the same motivation as in the present invention, it is noted that obviousness under 103 is not negated

because the motivation to arrive at the claimed invention as disclosed by the prior art does not agree with appellant's motivation. *In re Dillon*, 16 USPQ2d 1897 (Fed. Cir. 1990), *In re Tomlinson*, 150 USPQ 623 (CCPA 1996). Furthermore, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/3/2008  
Vickey Ronesi

/V. R./  
Examiner, Art Unit 1796\

/VASUDEVAN S. JAGANNATHAN/  
Supervisory Patent Examiner, Art Unit 1796